

members in the population anyone given anti-toxin should simultaneously receive toxoid at a different site.

UNDERGRADUATE EDUCATION

Efforts to adapt the curriculum of medical students to present-day needs continue. The U.K. College of General Practitioners, mindful of the need for adequate preparation of a fair proportion of United Kingdom undergraduates to play the exacting part of family doctors, has set up an Undergraduate Education Committee. This Committee now reports (*Brit. M. J.*, 1: 1146, 1954) an analysis of a questionnaire addressed to some of the recently formed regional faculties of the College, in order to find out what opinions were held by general practitioners themselves on medical training. This analysis deserves attention, since the keen general practitioner knows better than anyone what parts of his undergraduate training were superfluous and what essential aspects of his education were neglected.

The tendency to make the student specialize in scientific subjects in his last one or two years at school is deplored by the faculties; it is suggested that the student's time at this period should be evenly divided between a general education and an approach to scientific subjects.

In student selection for medical schools, it is felt that character, home background, heredity and school record should rank as high as mere academic achievement in scientific subjects; it also seems logical to have an experienced general practitioner on selection boards to assist the dean.

As is customary in such reports nowadays, the length of time devoted to instruction in anatomy and advanced surgery comes in for criticism, and teachers are also attacked for demonstrating obscure conditions in preference to simple and common variations in health and disease.

The need for giving the student more insight into general practice is stressed. Examples of techniques for introducing the student to the management of the patient outside hospital are given. Thus, one London consultant takes a student with him to his domiciliary visits; the use of general practice teaching units (as at Edinburgh) or of attachment of students to general practitioners is also mentioned. In any case, opportunities must be made for the student to come in contact with general practitioners right through his course, so that he may appreciate the great volume and variety of service which a general practitioner has to render.

Anyone who has been flung upon the uncharted sea of general practice without the navigational aid of a family tradition in the art must fervently acclaim the suggestions of the College, and hope that they will bring forth fruit.

Men and Books

CHOLERA IN QUEBEC IN 1849

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CHOLERA HAS APPEARED several times in Canada. Some of the epidemics were brought into the country at Quebec, which was then the sole port of entry for ships from Europe. In 1832 cholera appeared in Quebec, the infection having come from Dublin on the *Carrick*. It started in rue Champlain, like all the other epidemics, and carried off 3,451 persons out of a total urban population of not more than 30,000.

In 1834, there was another cholera epidemic. The 1832 outbreak had led to a government decision to construct at Quebec a hospital for seafarers and immigrants, designed for the treatment and care of sailors and immigrants who otherwise had no lodging but the rooming houses in the Quartier Champlain, where they were poorly installed and particularly badly cared for when ill.

Although the hospital was unfinished, it opened its doors in 1834 for the reception of cholera patients, only to close again in October when the epidemic was at an end. Construction continued and it was officially opened in May 1835. During 1834 cholera had claimed 2,509 victims in Quebec. It reappeared in 1849 and this time, 1,185 inhabitants of Quebec died.

The 1849 epidemic is of interest because of the development of medical ideas at this time, the statement being made in some quarters that the disease was contagious, a fact hitherto denied. It was believed that smallpox, typhus and typhoid were contagious diseases transmitted by contact with individuals or fomites, but this mode of transmission was not considered applicable to cholera, which appeared only as a result of unknown changes in the atmosphere. Some went so far as to attribute cholera to an atmospheric surplus of ozone, and used this theory to explain on chemical grounds the good effects of sulphur and wood charcoal on the disease.

In 1849 cholera came from the United States via Kingston, appearing relatively late in Grosse Isle (quarantine) at a time when the epidemic was on the wane in Quebec itself. Quebec was the port of entry for all ships coming from Europe, and every ship had to submit to quarantine inspection at Grosse Isle during the navigation season. The Inspector had orders to use firearms if necessary to exact obedience from a recalcitrant ship's captain. The volume of emigration from the British Isles was very great, particularly from Ireland where famine was

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widespread. In 1848, Europe had been invaded by cholera, and in 1849 it was still rampant in England and especially in Ireland. It was hoped that it would not cross the sea to Quebec.

In December 1848, Dr. Painchaud had given a public lecture on "Asiatic cholera," ending with the statement:

"If cholera is in England, it will have plenty of time to burn itself out before the merchantmen leave for Canada. Even if there were cholera in New York, it could not cross the border during winter; it might well ravage all the Southern States, but it would be gone before the snows melt. However, its appearance is possible, and it is up to us to be on our guard." (*Journal de Québec*, January 4, 1849).

Conditions of hygiene in Quebec were not calculated to favour prevention of the appearance or spread of the disease, for there was neither a piped water supply nor a sewerage system. Water was obtained from the numerous springs, from wells or even from the St. Lawrence, either at the mouth of the St. Charles river or at the quay-side. There was an organization of water carriers distributing water to a population of about 37,000. Sewage and refuse accumulated in courtyards, stables and streets, giving rise in certain quarters to almost suffocating smells. Some householders had installed private systems carrying off wastes to the river, but these discharged their contents at the very spots where drinking water was obtained for the population.

It was the 1849 cholera epidemic which led to a resolution by the Quebec Board of Health stressing the urgency of installing in the town, whose rocky foundation was ill adapted to absorption, an aqueduct for household water supply, as well as sewers. Water was obtained from the Indian reserve at Loretteville, and the aqueduct began to function in 1854. This was a great improvement, but sewers were not installed until somewhat later.

Cholera appeared on July 4 in the Champlain district of the Lower Town of Quebec. This district was situated at the foot of the cape, between the latter and the St. Lawrence. It consisted only of a single, long, narrow street built up on both sides. A poor and numerous population lived there all the year round, augmented during the navigation season by a tightly packed collection of sailors and immigrants. At the end of the street, at what was known as the cul-de-sac of the Lower Town, drinking water was obtained. The filthy state of this place was sufficient, according to the partisans of the non-contagion theory, to pollute the atmosphere and favour the development of cholera.

On the other hand, the champions of contagion attributed the outbreak to the presence of mattresses thrown overboard from sailing ships on which cholera had been present and drifted to the cul-de-sac of the Lower Town where the drinking water was obtained.

The epidemic spread very rapidly through the district and the town. A shoemaker called McGill was the first victim. He died within a few hours on July 4.

A Central Board of Health had been formed at Montreal by Act of Parliament (Act 12 Vict. ch. 8). It was composed of Drs. Wilfred Nelson, Guillaume Deschambault and Robert Ley MacDonnell and of Messrs. Olivier Berthelot, William Workman, John James Day and Moses J. Hayes. Dr. Aaron H. David was secretary. It had drafted orders and regulations, with special reference to cleanliness and cleansing of streets, courtyards and outhouses. All local Boards were obliged to furnish it with reports.

At Quebec, a Board of Health had been in existence since 1832, and took up its functions each year as required. It had been very active in 1832, 1834 and 1847. It had acquired considerable experience, since the same membership had been retained so far as possible. In this year (1849) the nominees were Messrs. Légaré and Sewell, Drs. Morrin and Nault, Mr. Boxer, Drs. Paradis, Joseph Painchaud and James Douglas. Most of these had sat on the Board during the 1847 typhus epidemic. Mr. Robert Symes was appointed sanitary inspector at a salary of ten shillings a day. F. X. Garneau, who was then preparing the History of Canada which was to render him famous, was the secretary and Dr. Morrin the chairman.

Dr. Joseph Morrin was a very busy man with a well developed social sense. He had just founded a medical school at Quebec. With Dr. J. Douglas, he did much work for the Beauport Asylum, and was an alderman of the city of Quebec. Laval University changed his medical school into a Faculty of Medicine, and he left it a sufficient sum in his will to establish a prize still known as the Morrin Prize.

The Board of Health was very active. It organized domiciliary visits, and four doctors (Bardy, Wolf, Robitaille and Carrier) were designated for these visits, with the duty to report every case of illness, cholera or otherwise. These reports, evidence of a well-developed social sense, contributed largely to the cleansing of the town, its streets and the quays of the old City, to the movements for installation of a water supply and sewerage systems, and even to the improvement of the city finances.

CONTAGION OR NON-CONTAGION

The general opinion at this time was that cholera was not a contagious disease in the same sense as smallpox, typhoid or typhus. Contact with or proximity to cholera patients did not lead to cholera. As examples, the doctors, nurses, priests and relations who came in close contact with patients without harm were cited, in contrast to typhus which, two years earlier, had taken a heavy toll of the doctors, priests and hospital personnel, particularly on Grosse Isle. How-

ever, from time to time a warning voice was raised.

In July 1849, an alarmist who signed himself "Delta" had written the following in the *Gazette and Mercury*.

"I am an alarmist and I want to do what the Board of Health won't do—alarm the public, so that it won't run unnecessary risks. Fear does not cause cholera but fear can predispose to it; if in such a state you come in contact with the disease you may contract it and probably will."

Poor "Delta" was attacked by the medical profession, the citizens and the newspapers, and one fine day he decided to break off the argument. The *Quebec Mercury* published (August 28, 1849) a humorous account of his journalistic funeral. He had been accused of frightening a certain number of citizens who had in consequence taken the cholera and died.

Against the contagion theory, the argument was used that individuals in perfect health and with absolutely no contact with cholera patients were suddenly taken with cramps, profuse diarrhoea, and coldness and were carried off in a few hours, while others who carried the corpses resisted infection entirely; hospitals containing cholera patients in thickly populated parts of London and elsewhere had not conveyed the disease, and few cases of cholera had been seen among the medical and other personnel.

Dr. John Hall, a Quebec surgeon, published a long article in the *Quebec Mercury* on August 18, against the contagiousness of cholera, ending by quoting the conclusions of the Board of Health of New York City, which had appeared in the *New York American Journal* in July of that year.

"The undersigned believe that the cause of the disease exists in the atmosphere and that the whole of the community are at present more or less under the influence of the peculiar condition of the atmosphere . . . and in this way predisposed to the disease. To develop the disease, however, existing causes are necessary, and these are to be found in all those things which have a tendency to disorder the bowels. With regard to the peculiar condition of the atmosphere which predisposes to the disease, we know nothing. Human skill and agency, therefore, can do nothing in meeting this difficulty. The existing causes, on the contrary are in a great measure under our control, and by properly guarding against these, much, very much may be done in obviating the development and extension of the disease." Signed: John Beck, M.D., Sam'l W. Moore, M. David, Joseph Smith."

Hence it was generally believed that the disease was in the atmosphere and that it developed only in the presence of certain favouring factors in the individual, in his behaviour or in his atmospheric environment. Dirtiness, mephitic and nauseating odours, fatigue, anxiety, fear, lack of food, and especially the use of alcohol were certain to lead to the appearance of the disease.

There were sceptics, however, who thought that all this campaign for street and court cleans-

ing was fit only to scare the populace. The *Quebec Morning Chronicle* of July 23 said:

"With all respect for our contemporaries . . . we state plainly, dogmatically and confidently, that neither diet nor cleanliness have anything to do with the matter; whether chloride of lime, of zinc, burning barrels of tar or draining cesspools are vain and useless in the open air. The drains and sewers smell no worse this year than last, vegetable matter decays not more speedily this summer than it did in July 1848, the poor are not dirtier, nor the rich cleaner than they ever have been; poverty and sloth produce dirt now as ever, and wealth revels on clean linen and drops asleep on comfortable beds and well aired bed rooms at present as they have been wont; yet both classes are seized with cholera, and the disease shows little favour. . . ."

Dr. von Iffland, a distinguished Quebec physician then attached to the Beauport Asylum which Dr. James Douglas had founded in 1845, sent a long letter to the *Canadien de Québec* on the non-contagiousness of cholera. The letter was published on June 18, some weeks before the disease appeared. According to him, cholera was not contagious or else the human race would have ceased to exist. In contrast to smallpox, this disease could attack the same person several times; if it were contagious, it would disappear only when there were no victims. He explained that all epidemic diseases had their origin in the same thing, the state of the air. This was the best solution that could be given, although the actual atmospheric conditions favouring or producing these diseases were unknown. It was a fact that these epidemics appeared particularly when the atmosphere was moist and hot. Von Iffland added, "The atmospheric changes at these times will presumably always remain unknown."

Like many others, Dr. von Iffland did not know that, in Paris, Pasteur was already finding a reply to these questions and that the reply would destroy all these fine theories. Nor could he foresee that in 1885 Koch would demonstrate the cholera vibrio, responsible for the disease.

Although the medical profession in general did not believe in the contagion of cholera, the Quebec population feared it like the plague and in the face of its rapid spread felt that close contact was a danger factor in its propagation. The patients coming from Grosse Isle and destined for admission to the Marine Hospital crowded on to the *quai des Indes* and the *quai de la Reine* and had to pass right through the town before reaching the hospital, which was situated on the banks of the St. Charles river, at the end of St. Roch quarter. Because of the state of the wood-paved streets and the steep slopes to be climbed, this journey constituted a "stress" sufficient to prove fatal to the poor patients, especially the incipient cases and those disembarked in the algid state.

The Board of Health had therefore decided to instal a temporary hospital in the Customs House, situated right in the Champlain district. This building was at that time lodging the muni-

cipal police. The neighbouring population, terrified at the thought of having in their midst a constant source of infection capable of spreading the disease and likely to cost them dear, protested to Dr. J. Douglas, who paid no attention to their protests. On the evening of July 11, at about 9 p.m., 2,000 inhabitants of the Champlain district carried by assault the police barracks which were about to be transformed into a cholera hospital, and demolished doors, windows, staircases, in fact, everything but the walls. The few policemen stationed there took to their heels. Mr. Symes, the sanitary inspector, rushed up and tried to restore order, but was jostled and beaten and had to retire with a bleeding face. The Board of Health had the building repaired, regretted the disturbance, and decided that the Marine Hospital, situated somewhat outside the town, should house the cholera cases, and that the town should pay for any citizens admitted.

TREATMENT

The methods of treating cholera at this time were very varied, especially as regards drugs. Dr. J. Painchaud, the doyen of Quebec medicine, gave advice to the population in the *Canadien* of July 13 and the *Journal de Québec* of July 12. It was considered at this time that certain symptoms now recognized as part of the disease were only premonitory. If they were treated at once, the disease could be prevented. This is what he said:

"The precursory symptoms of cholera are a sudden malaise, a tendency to vomit, colic and irritant stools; if the latter tend to be whitish and like soapflakes, the danger is great and there is no time to be lost. Take what your doctor has already given you, and do exactly what he has advised, until he can get to you. If the symptoms get less, and particularly if the stools become darker, you are safe and you can leave your doctor free to rush to others in greater danger."

The Central Board of Health, Montreal, had laid down the general lines of treatment of cholera, and especially of the "precursory" signs (borborygmi, flatulence, a sensation of heat or repletion in the stomach, colic, a bad taste in the mouth, nausea), leaving the general practitioner to manage the case as he thought best once the diagnosis was confirmed. The following prescription was recommended from the start:

Tr. Zingib. } aa 5 i
Tr. Piperis rubri }
Syr. Zingib. 5 i

One teaspoon every half hour.

If diarrhoea was present, 15 drops of laudanum or one teaspoonful of elixir of paregoric in a little water was added, or alternatively the patient was to eat "a piece of opium præparata the size of a marble." If the onset was sudden, a mustard plaster was to be applied between the shoulders and in the epigastrium, while the feet were kept

for 20 to 30 minutes in hot water containing a teaspoonful of mustard. The patient was to be put to bed, and covered up well with hot water bottles and hot flannels around his feet and body; in other words, copious sweating was to be induced. Purgatives, mineral water, alcoholic beverages, and especially brandy were to be avoided (*Journal de Québec*, July 21).

One young Quebec doctor, Dr. Rémi Cayer, used a preparation with a basis of aromatic tincture of iron chloride, which gave much publicized results. A merchant he had met in the United States and who had lived in India had extolled the virtues of this preparation to him. This young doctor at the bidding of his friends finally disclosed his preparation, and published the formula and the results in a childishly pompous article in a Quebec paper. Dr. Painchaud, then a visiting physician at the Marine Hospital, first commended him and promised to try out the preparation on cases of cholera in the hospital, following Dr. Cayer's instructions closely. After a few days, he hastened to publish the results of his trials in the same paper. Of the seven patients admitted on the 18th, five were dead; of the seven admitted on the 19th, all were dead. The patients had not responded any better to this preparation than to any other, and Dr. Painchaud seized the occasion to rail against what he called the charlatan's methods of his young colleague who "believed that he had found the sovereign remedy for cholera."

However, the *Journal* on July 25 printed as its headline "Has the cure for the terrible scourge of cholera at last been found?" and described the whole story of Dr. Cayer's famous remedy and the bitter remarks of Dr. Painchaud. Meanwhile, Cayer's remedy had travelled around, and laudatory letters arrived from Montreal, Charlesbourg, Beauharnois and elsewhere. In Montreal, Madame Lalonde, the famous singer, was attacked by extremely severe cholera and seemed likely to die. Dr. Picault, assisted by Dr. McCulloch, gave her Cayer's remedy and in a few hours she was better and in a few days convalescent (*Montreal Herald*, July 30).

Dr. von Iffland shared Dr. Cayer's view on the value of ferric chloride, but he pointed out to the public that this was not a scientific discovery but the use of a well-known method, utilized the preceding year in India and Teheran by Dr. Charles Bell, who had even reported the good results in England at the Manchester Royal Infirmary. Dr. Cayer confined Dr. von Iffland's statement, but added that he had personally improved the efficacy of the drug by adding a carminative, oil of anise. Dr. Cayer considered that the addition of oil of anise to his "mixture", as he called his prescription, converted the latter into "a powerful tonic, a severe astringent to the intestines, and a potent agent on the blood, and kept the patient's circulation free. The carminative has the effect of softening the violent action of tincture of ferric chloride on the stomach, and

preventing this organ from rejecting it by vomiting." (*Journal de Québec*, July 19).

These letters and invectives published in the press by the doctors helped to create some uneasiness in the population, and to arouse more fear of this disease which sometimes killed with lightning rapidity. In the United States, the disease was almost universal and the reports from the big cities such as New York, Philadelphia, St. Louis and Cincinnati were no more encouraging.

Since the appearance of the disease in Quebec, whole families had fled from the polluted atmosphere to the country. The doctors had however remained, and the Board of Health was pleased to recognize their devotion at the end of the epidemic, in spite of their dissensions on therapy. The undertakers had also remained at their posts. It is reported that in the Champlain district, which was the hardest hit, one of these gentlemen kept one of his hearses permanently available, ready harnessed and parked in the street. His horses, with their heads in a nosebag, were ready for the coachman, who answered any summons. The complaints about this macabre practice led to the withdrawal of the carriage and horses into the stables.

The cholera disappeared in mid-September. It had cost the City of Quebec £6,000. The work of the Board of Health and the hygiene measures taken by it had played a large part in checking its spread and its grave consequences. Nevertheless, 1,185 persons were buried in the cholera cemetery of Chemin St. Louis and the Catholic and Protestant Cemeteries of the Vacherie near to the Marine Hospital.

The disease reappeared on three further occasions in Quebec in 1851, 1852 and 1854, but its visits were brief. The epidemic of 1851 went by almost unknown to the population, and it was only at its end, when 280 persons had died, that its visit to Quebec was made public.

LE CHOLERA A QUEBEC EN 1849

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LE CHOLERA fit plusieurs apparitions au Canada. Quelques-unes des épidémies entrèrent au pays par Québec, qui était alors le port d'arrivée de tout navire qui venait d'Europe. Ce fut en 1832, que le choléra fit son entrée à Québec venu de Dublin sur le "Carrick." Il apparut sur la rue Champlain comme toutes les autres épidémies. Il fit 3,451 victimes dans la ville dont la population ne dépassait pas 30,000 âmes.

En 1834, nouvelle épidémie de choléra. Celle de 1832, avait déterminé le Gouvernement à construire à Québec, un Hôpital de Marine et des Emigrés dans le but de traiter et secourir les marins et les immigrants qui n'avaient d'autres endroits pour se loger que les maisons

de pension du Quartier Champlain où ils étaient mal logés et surtout mal soignés, s'ils étaient malades.

L'hôpital encore incomplet ouvre quand même ses portes en 1834, pour recevoir les cholériques. Une fois l'épidémie disparue, il ferme en octobre 1834; les travaux se continuent et en mai 1835, il est officiellement inauguré. Cette année-là, 1834, le choléra fait 2,509 victimes à Québec. Il reparait de nouveau en 1849, et il fait mourir 1,185 Québécois.

Cette épidémie de 1849 devient intéressante à cause de l'évolution des idées médicales de l'époque et de l'énoncé, dans certains milieux, de la contagiosité de la maladie, fait que l'on avait nié jusque-là. On croyait que la variole, le typhus, la typhoïde étaient des maladies contagieuses qui se transmettaient par contact d'individus ou d'objets, mais on niait cette propriété au choléra qui n'apparaissait qu'à cause de changements inconnus, dans l'atmosphère. Quelques-uns même l'attribuaient à une surcharge de celle-ci en ozone et en profitaien pour expliquer chimiquement les bons effets du soufre et du charbon de bois contre le choléra.

Cette année-là le choléra nous vient des Etats-Unis par Kingston. Il n'apparut que très tard relativement à la Grosse-Isle (Quarantaine) alors même qu'il était à son déclin à Québec même. Québec était le port d'entrée de tous les navires venant d'Europe, et tout navire devait se soumettre à l'inspection à la Quarantaine de la Grosse-Isle, en saison de navigation. L'Inspecteur avait ordre de se servir d'armes à feu, si nécessaires pour faire obéir un capitaine récalcitrant.

Le courant d'émigration venant des îles Britanniques et surtout d'Irlande où sévissait la famine, était très fort. En 1848 l'Europe avait été envahie par le choléra et en 1849 il régnait encore en Angleterre et en Irlande, en particulier. On espérait bien à Québec qu'il ne traverserait pas les mers.

Le Dr. Painchaud, en décembre 1848, avait donné une conférence publique sur le "Choléra Asiatique" qu'il terminait ainsi:

"Si le choléra est en Angleterre, il aura bien le temps de s'éteindre avant que les bâtiments marchands partent pour le Canada. Quand même le choléra serait à New York, il ne peut passer nos lignes durant l'hiver; il pourra bien parcourir toute l'Amérique Méridionale, mais il sera éteint avant la fonte des neiges. Cependant la chose est possible, et c'est à nous tenir sur nos gardes." (*Le Journal de Québec*-4 janvier 1849).

Les conditions hygiéniques étaient bien pauvres à Québec pour empêcher ou prévenir la propagation de la maladie. On n'avait ni aqueduc ni égouts. On puisait l'eau dans des sources qui étaient nombreuses, dans des puits ou encore dans le fleuve St-Laurent, soit à l'embouchure de la rivière St-Charles ou sur les quais. Toute une organisation de charroyeurs d'eau s'était faite qui distribuait l'eau à une population d'environ 37,000 habitants. Les égouts et les déchets s'ac-

cumulaient dans les cours, les écuries ou dans les rues, dégageant, en certains quartiers, des odeurs parfois irrespirables. Quelques propriétaires s'étaient installés des tuyauteries à eux qui apportaient au fleuve les déjections mais elles aboutissaient aux endroits mêmes où on puisait l'eau potable pour la population.

C'est à la suite du choléra de 1849, que le Bureau de Santé de Québec, forma une proposition et insista sur l'urgence d'établir à Québec, sol rocaillous se prêtant mal aux absorptions, un aqueduc qui apporterait l'eau à la maison, et des égouts. On alla chercher l'eau à Loretteville, à la réserve indienne, et en 1854 l'aqueduc entrat en opération. C'était déjà une grosse amélioration. Il faut attendre un peu plus tard pour avoir les égouts, cependant.

Le choléra apparut à Québec le 4 juillet, à la Basse-Ville au Quartier Champlain. Ce Quartier était situé au pied du Cap entre celui-ci et le fleuve St-Laurent. Il ne contenait qu'une seule et longue rue, étroite, construite des deux côtés. Une population pauvre et nombreuse y vivait à l'année, augmentée pendant la saison de la navigation par des marins et des émigrés qui s'y entassaient.

Au bout de cette rue, à un endroit qu'on appelait le cul-de-sac de la Basse-Ville on cueillait l'eau potable. L'état de malpropreté qui régnait là était suffisant pour les partisans de la non-contagiosité, pour vicier l'atmosphère et favoriser le développement du choléra. D'autres, les contagionnistes, attribuaient l'éclosion de la maladie à la présence de paillassons que des voiliers ayant souffert de la maladie, avaient jeté par-dessus bord et qui étaient venus se déposer près du cul-de-sac de la Basse-Ville, là où on puisait d'eau à boire. La maladie se propagea très vite dans ce Quartier et dans toute la ville. Un nommé McGill, un cordonnier en fut la première victime. Il mourut en quelques heures de maladie, le 4 juillet.

Un Bureau de Santé Central avait été formé à Montréal, par acte gouvernemental (Act-12 Vict. ch.8). Il était composé de MM. les Drs. Wilfred Nelson, Guillaume Deschambault et Robert Ley MacDonnell, de MM. Olivier Berthelot, William Workman, John James Day et Moses J. Hayes. Le Dr. Aaron H. David en était le Secrétaire. Il avait édicté des ordonnances et des règlements, insistant surtout sur la propreté, le nettoyage des rues, des cours et des dépendances. Chaque bureau local devait lui faire rapport.

A Québec, un Bureau de Santé existait, depuis 1832, qui reprenait fonction, chaque année, suivant les circonstances. Il avait été très actif en 1832, 1834 et 1847. Il avait acquis une expérience considérable, étant donné qu'on avait conservé autant que possible les mêmes hommes. Furent nommés cette année-là MM. Légaré, Sewell, Dr. Morrin, Dr. Nault, M. Boxer, Dr. Paradis, Dr. Joseph Painchaud et le Dr. James Douglas. La

plupart avaient siégé sur ce Comité pendant l'épidémie de typhus de 1847. M. Robert Symes fut nommé inspecteur sanitaire au salaire de 10 sh. par jour et F. X. Garneau, qui préparait alors l'*Histoire du Canada*, qui le rendra célèbre, en était le secrétaire. Le Dr. Morrin en était le président.

Ce Dr. Jos. Morrin était un homme très occupé, doué d'un très grand sens social. Il venait de fonder à Québec une Ecole de Médecine. Il s'occupait activement de l'Asyle de Beauport avec le Dr. J. Douglas et il était échevin de la Cité de Québec. L'Université Laval transforma son Ecole de Médecine en Faculté de Médecine et il lui laissa à sa mort une gratification suffisante qu'on appelle encore le Prix Morrin. Ce Bureau de Santé fut très actif. Il organisa les visites domiciliaires et quatre médecins étaient désignés pour ces visites avec devoir de rapporter tout cas de maladie, choléra ou autre. Ce furent les Drs. Bardy, Wolf, Robitaille et Carrier. Ces rapports empreints d'un sens social très avancé, ont contribué fortement à assainir la ville, les rues, les quais de la vieille cité, à promouvoir l'installation de l'aqueduc, des égouts, et même l'amélioration de l'état financier de la ville.

CONTAGIOSITÉ OU NON CONTAGIOSITÉ

L'opinion générale, à cette époque, était que le choléra n'était pas une maladie contagieuse au même titre que la variole, la typhoïde ou le typhus. Le contact ou le voisinage avec les cholériques n'apportait pas le choléra et on donnait comme exemple les médecins, les infirmières, les prêtres, les parents qui côtoyaient les malades sans prendre la maladie, contrairement au typhus, qui deux ans auparavant, avait fait de nombreuses victimes chez les médecins, les prêtres, et le personnel hospitalier, notamment à la Grosse-Isle.

Cependant, de temps à autre, une voix s'élevait qui criait: "Attention." En juillet 1849, un alarmiste qui signait "Delta" avait écrit dans la *Gazette* et le *Mercury* où il disait:

"Je suis alarmiste et je voudrais alarmer tout le monde, le Bureau de Santé ne voulant pas le faire, assez pour qu'on ne s'exposât pas sans nécessité au danger. La peur ne donnera pas le choléra, mais la peur y prédisposera, et si avec cela vous allez au-devant de la maladie, vous pourrez la contracter et la contracterez probablement."

Ce pauvre "Delta" se vit vilipender par des médecins, des citoyens, les journaux et un bon jour il décida de ne plus continuer la polémique; et un article humoristique des funérailles journalistiques de ce Monsieur, fut publié dans le *Mercury de Québec*. (28 août 1849). On l'accusait d'avoir engendré la peur chez un certain nombre de citoyens qui prirent ainsi le choléra et en moururent.

Contre la contagiosité on apportait aussi l'argument que des individus en parfaite santé n'ayant eu aucun contact avec des cholériques, étaient pris brusquement, de crampes, de diar-

rhée profuse, d'algidité et liquidé en quelques heures, tandis que d'autres, des convoyeurs de morts, résistaient à toute infection, que des hôpitaux situés en pleins quartiers populeux à Londres et ailleurs et hébergeant des cholériques n'avaient pas transmis la maladie et qu'on avait vu peu de cas de choléra parmi le personnel médical et autre.

Le Dr. John Hall, chirurgien de Québec, publie un long article dans le *Mercury de Québec* du 18 août, contre la contagiosité du choléra et il termine en rapportant les conclusions du Bureau de Santé de la ville de New York, parues dans le *New York American Journal* de juillet de la même année.

"The undersigned believe that the cause of the disease exists in the atmosphere and that the whole of the community are at present more or less under the influence of the peculiar condition of the atmosphere . . . and in this way predisposed to the disease. To develop the disease, however, existing causes are necessary, and these are to be found in all those things which have a tendency to disorder the bowels. With regard to the peculiar condition of the atmosphere which predisposes to the disease, we know nothing. Human skill and agency, therefore, can do nothing in meeting this difficulty. The existing causes, on the contrary are in a great measure under our control, and by properly guarding against these, much, very much may be done in obviating the development and extension of the disease", et c'est signé: John Beck, M.D., Sam'l W. Moore, M. David, Joseph Smith.

On croyait donc généralement que la maladie était dans l'air, l'atmosphère, et qu'elle ne se développait qu'à l'occasion de certaines causes favorisantes, existant chez l'individu, dans son comportement ou dans son entourage atmosphérique. La malpropreté, les odeurs méphitiques et nauséabondes, la fatigue, l'inquiétude, la peur, la privation d'aliments et surtout l'usage de boissons alcooliques provoquaient à coup sûr l'apparition de la maladie. Il y avait des sceptiques cependant, qui croyaient que toute cette campagne favorisant le nettoyage des rues, des cours n'étaient propres qu'à effrayer les gens.

Le *Quebec Morning Chronicle* du 23 juillet disait:

"With all respect for our contemporaries . . . we state plainly, dogmatically and confidently, that neither diet nor cleanliness have anything to do with the matter; whether chloride of lime, of zinc, burning barrels of tar or draining cesspools are vain and useless in the open air. The drains and sewers smell no worse this year than last, vegetable matter decays not more speedily this summer than it did in July 1848, the poor are not dirtier, nor the rich cleaner than they ever have been; poverty and sloth produce dirt now as ever, and wealth revels on clean linen and drops asleep on comfortable beds and well aired bed rooms at present as they have been wont; yet both classes are seized with cholera, and the disease shows little favour. . . ."

Le Dr. Von Iffland, médecin distingué de Québec, attaché à cette époque à l'Asyle de Beauport, qu'avait fondé, en 1845, le Dr. James Douglas, adresse au Canadien de Québec, une longue lettre sur la "non-contagiosité" du choléra, que ce journal publie le 18 juin, quelques semaines avant l'apparition de la maladie. Pour lui

le choléra n'est pas contagieux car s'il l'était la race humaine n'existerait plus. Cette maladie, à l'encontre de la variole, peut attaquer plusieurs fois le même individu et si elle était contagieuse elle ne disparaîtrait que faute de sujet.

Toutes les maladies épidémiques, explique-t-il, tirent leur origine d'une même cause, à savoir, l'état de l'air. C'est la meilleure solution qu'on puisse en donner bien que l'on ne sache pas quelles sont les conditions de l'atmosphère qui favorisent ou produisent ces maladies. Il est un fait c'est que ces épidémies apparaissent surtout lorsque l'atmosphère est humide et chaude, et il ajoute: "Les changements de l'air, à ces époques, doivent nous rester à jamais inconnus."

Il ne savait pas encore, le Dr. Von Iffland, pas plus lui que bien d'autres, que déjà, à Paris, Pasteur était en train de trouver une réponse à ces inconnus, réponse qui détruirait toutes ces belles théories, et qu'en 1885 Koch montrerait au monde le vibron cholérique, le responsable de la maladie.

Si la profession médicale en général ne croyait pas le choléra contagieux, la population de Québec, le craignait comme une peste, et constatant son expansion rapide, pensait bien qu'un contact rapproché était dangereux pour sa propagation. Les malades venant de la Grosse-Isle et devant être hospitalisé à l'Hôpital de la Marine, abondaient au quai des Indes ou au quai de la Reine et devaient traverser toute la ville pour arriver à cet hôpital qui était situé sur les bords de la rivière St-Charles, aux confins du Quartier St. Roch. Etant donné l'état des rues, les côtes assez abruptes à gravir, pavées en bois, ce voyage constituait pour ces pauvres malades, et en particulier pour les cholériques à venir, surtout ceux qui seraient débarquées à la période d'algidité, un "stress" suffisant, pour les faire mourir.

Le Bureau de Santé, avait donc décidé d'installer un hôpital temporaire dans l'édifice de la douane situé en plein Quartier Champlain. Cet édifice logeait alors la police municipale. La population du Quartier, effrayée d'avoir en plein milieu d'eux, un foyer d'infection constant qui pourrait propager la maladie, à qui elle avait déjà payé un fort tribut, proteste auprès du Dr. J. Douglas qui reçoit mal ses remarques.

Le 11 juillet au soir, vers 9 hr, 2,000 habitants de ce quartier Champlain, prennent d'assaut la caserne de la police qu'on veut transformer en hôpital de cholériques, démolissent portes, fenêtres, escaliers, tout, excepté les murs. Les quelques agents de police qui y étaient stationnés prennent la fuite. M. Symes, l'inspecteur du Bureau de Santé, qui accourt, essaye de rétablir l'ordre. Il est bousculé, battu et il doit se retirer la face en sang. Le Bureau de Santé fait réparer l'édifice, déplore les incidents survenus et décide que l'Hôpital de la Marine situé, un peu en dehors des limites de la ville, hébergera les cholériques, et que la ville paiera les frais des citoyens hospitalisés.

TRAITEMENT

Les modes de traitement du choléra à cette époque étaient très variables, surtout en ce qui concernaient les médicaments. Le Dr. J. Painchaud, doyen des médecins de Québec, donnait dans le *Canadien* du 13 juillet et le *Journal de Québec* du 12 juillet, les conseils d'usage à la population. On admettait alors que certains symptômes considérés aujourd'hui comme faisant partie de la maladie, n'étaient alors que les signes avant-coureurs de l'infection. Traités dès lors on pouvait éviter l'atteinte de la maladie. Voici ce qu'il disait:

"Les symptômes avant-coureurs du choléra sont un malaise subit, une tendance à vomir, des coliques et des selles épineuses; si ces dernières tirent sur un blanc appranchant celui de la savonure, le danger est grand, et il n'y a pas de temps à perdre. Prenez alors ce que votre médecin vous aura donné d'avance; faites exactement ce qu'il vous aura recommandé, jusqu'à ce qu'il soit auprès de vous. Si les symptômes diminuent, et si les selles, surtout, sont d'une couleur plus foncée, vous êtes en sûreté, et vous pouvez laisser votre médecin courir à d'autres plus en danger que vous."

Le Bureau Central de Santé de Montréal avait édicté les données générales du traitement du choléra, surtout des signs "avant-coureurs" (grondement de boyaux, flatuosité, chaleur ou réplétion dans l'estomac, coliques, mauvaise bouche, nausées), laissant au médecin traitant la conduite thérapeutique qu'il jugera bon d'utiliser une fois la maladie confirmée.

Voici ce qu'on recommandait dès le début:

Teinture de gingembre	}	i 5	—
Teinture de poivre rouge			aa
Sirop de gingembre		i 5	
1 c. à thé toutes les demi-heures			

Si la diarrhée existe on ajoute 15 gouttes de laudanum ou une c.à thé d'élixir parégorique dans un peu d'eau, ou encore "manger un morceau de préparation d'opium de la grosseur d'un marbre." Dans les cas d'apparition brusque et subite, on prescrivait des applications d'emplâtre de moutarde entre les deux épaules sur le creux de l'estomac, les pieds dans l'eau chaude contenant 1 c.à thé de moutarde pendant 20 à 30 minutes. Mettre le malade au lit, le couvrir abondamment, mettre des bouteilles d'eau chaude et des flanelles chaudes autour des pieds et du corps; en somme provoquer une "suerie" abondante. Eviter les purgatifs, les eaux minérales, les boissons alcooliques en particulier le brandy. (*Journal de Québec*, 21 juillet).

Un jeune médecin de Québec, le Dr. Rémi Cayer utilisait une préparation à base de tr de muriate de fer aromatisée, qui lui donnait des résultats dont on parlait beaucoup. Un négociant, rencontré aux Etats-Unis, et qui avait vécu aux Indes, lui avait vanté les bons effets de ce médicament. Ce jeune médecin, sur les instances de ses amis, finit par produire son médicament, et dans un article d'une pompe enfantine publie

dans un journal de Québec, sa formule et ses résultats. Le Dr. Painchaud, alors médecin visiteur à l'Hôpital de la Marine, le louange fort d'abord et lui promet d'essayer son médicament en suivant bien les indications données par le Dr. Cayer, chez des cholériques de l'Hôpital. Il ne tarde pas au bout de quelques jours de publier dans le même journal les résultats de son essai. Des 7 cas admis le 18-5 sont morts. Des 7 cas admis le 19-7 sont morts. Ses malades n'ont pas répondu mieux qu'à toute autre médication et il en profite pour déblatérer contre ce qu'il appelait les façons charlatanesques de son jeune confrère qui "croyait avoir trouvé le grand remède contre le choléra."

Le *Journal* du 25 juillet d'ailleurs écrivait en tête de son reportage: "Le choléra: Le remède à ce fléau redoutable est-il enfin trouvé?" . . . et il racontait toute l'histoire du fameux remède du Dr. Cayer et des remarques acerbes du Dr. Painchaud.

Pendant ce temps le remède Cayer avait fait son chemin et des lettres louangeuses arrivaient de Montréal, de Charlesbourg, de Beauharnois, etc. A Montréal Mme Lalonde, la célèbre cantatrice est atteinte d'un choléra excessivement grave. On croit qu'elle va mourir. Le Dr. Picault assisté du Dr. McCulloch, lui administre le remède Cayer. En quelques heures elle se remettait et au bout de quelques jours elle était convalescente. (*Montreal Herald* 30 juillet).

Le Dr. Von Iffland partage l'opinion du Dr. Cayer sur la valeur du fer muriatisé, mais il apporte au public le fait que l'on n'est pas en présence d'une découverte scientifique, mais d'une méthode déjà connue, utilisée aux Indes et Téhéran l'année précédente par le Dr. Charles Bell, qui d'ailleurs en avait annoncé les bons effets en Angleterre au Royal Infirmary de Manchester. Le Dr. Cayer confirme d'ailleurs cette assertion du Dr. Von Iffland, mais il ajoute que ce qui augmente l'efficacité de ce médicament c'est que, lui, il y ajoute un carminatif l'huile d'anis. Le Dr. Cayer considérait que l'addition d'huile d'anis à sa "mixtion," comme il appelait sa prescription, faisait de celle-ci "un tonique puissant, un astringent sévère sur les intestins, un agent fort sur le sang, et conservait au patient sa circulation libre." "Le carminatif avait pour effet d'adoucir l'action violente que la teinture de muriate de fer opère sur l'estomac et empêcher que cet organe ne la rejette par le vomissement." (*Journal de Québec*, 19 juillet).

Ces lettres et ces invectives entre médecins par la voie des journaux contribuaient à créer un certain malaise dans la population et entretenir la peur contre cette maladie qui parfois tuait avec une rapidité foudroyante. Aux Etats-Unis la maladie sévissait un peu partout et les rapports qui arrivaient des grandes villes comme New York, Philadelphie, St-Louis, Cincinnati, n'étaient pas plus encourageants. Dès l'apparition de la maladie à Québec, des familles entières

déménagèrent à la campagne, fuyant une atmosphère polluée. Les médecins cependant, restèrent sur place et le Bureau de Santé se plut à reconnaître leur dévouement à la fin de l'épidémie, malgré leurs dissensions thérapeutiques.

Les croquemorts aussi restèrent au service de la population. On rapporte que dans le Quartier Champlain, le plus affecté, un de ces messieurs gardait en permanence un de ses corbillards (hearses) à la disposition, toujours attelé, et stationné en pleine rue. Ses chevaux, la tête dans leur mangeoire, attendaient le cocher qui répondait aux appels. Des plaintes contre cette macabre coutume firent entrer dans ses écuries, la voiture et son attelage.

Le choléra disparut vers la mi-septembre. Il avait coûté £6,000 à la Cité de Québec. Le travail du Bureau de Santé, les mesures hygiéniques prises contribuèrent fortement à en atténuer l'expansion et les effets néfastes. Quand même 1,185 individus y laissèrent leurs os, dans le cimetière des cholériques du Chemin St-Louis, et les cimetières catholiques et protestants de la Vacherie près de l'Hôpital de la Marine.

La maladie fit encore trois apparitions à Québec en 1851, 1852 et en 1854, mais elles furent de courte durée. Celle de 1851, passa à peu près inconnue de la population et ce n'est qu'à la fin de l'épidémie, qui fit mourir environ 280 individus, qu'on fit connaître son passage à Québec.

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MEDICAL SOCIETIES

CANADIAN PSYCHOANALYTIC SOCIETY

Election.—Dr. Hans Aufreiter, training analyst of the Vienna Psycho-Analytical Society and Institute, was elected a member of the Canadian Psychoanalytic Society on May 28, 1954.

Scientific meeting (Montreal, June 13, 1954).—A paper was delivered on "The Problem of Transference," by Dr. Daniel Lagache, president of the Société française de psychanalyse and professor of Psychology at the Sorbonne. A few of the author's original contributions deserve special mention. A distinction was drawn between the analyst's transference on the analyzand and counter-transference, the latter being a response to transference; thus, both the analyst and the patient may exhibit at

times attitudes due to counter-transference. Positive transference was defined as the type of doctor-patient relationship which promotes the treatment's progress; negative transference hinders the course of analysis.

Public meeting (Montreal, June 14, 1954).—The second public meeting of the Society was held at the Hôtel-Dieu Hospital and addressed by Dr. D. Lagache, who spoke on "The Results of Psychoanalytic Treatment." The guest speaker emphasized the following criteria in mental health: capacity of producing, tolerating and reducing tensions (needs), with satisfaction for the individual; capacity to realize one's possibilities; capacity to organize a plan of life; capacity to adjust one's aspirations; capacity to deal with other people; capacity to identify both with the conservative and the creative forces in society. Psychoanalytic cure is "a new health."

J. B. BOULANGER

CANADIAN DERMATOLOGICAL SOCIETY

The eighth annual meeting of the Canadian Dermatological Association was held at Harrison Hot Springs Hotel, B.C. on June 13 to 15 and at Shaughnessy Hospital, Vancouver, B.C. on June 16, 1954. Twenty-two members and 12 guests were present. The following papers were read: (1) Introductory Remarks—Dr. D. H. Williams, Vancouver. (2) A Case of Sporotrichosis—Drs. L. P. Ereaux, G. E. Craig, G. Kalz and F. Blank, Montreal—Read by Dr. C. J. Fournier, Vancouver. (3) Porphyria—Report of Two Cases—Dr. G. B. Sexton, London. (4) Vitamin D₂ in Dermatology—Dr. J. Grandbois, Quebec. (5) The Problem of Antibiotic Resistance of Staphylococci—Dr. G. Williamson, Ottawa. (6) Recent Addition to Failure in Therapy in Onychomycosis—Dr. R. Schacter, Toronto. (7) Preliminary Report on Laboratory Investigations in Vitiligo—Dr. K. G. Davidson, Winnipeg. (8) A Small Punch Biopsy Technique—Dr. D. H. Williams, Vancouver. (9) Cutaneous Leishmaniasis—Report of Three Cases—Dr. R. C. Smith, Toronto. (10) Impetigo Herpetiformis Recurrens—Dr. E. Gaumond, Quebec. (11) Kerato-Acanthoma and Related Epithelial Hyperplasias—Drs. P. Schopflocher and L. P. Ereaux, Montreal, Que. (12) Leprosy—Report of Three Cases—Dr. B. Kanee, Vancouver. (13) Contact Dermatitis from Platinum Metals—Report of a Case—Dr. C. S. Sheard, Stamford, Conn.

Following the annual dinner on Monday, June 14, Dr. G. S. Williamson of Ottawa presented a highly interesting, illustrated talk "Arctic Adventure," describing his trip to the Canadian Arctic in 1953.

On Wednesday, June 16 a clinical session was held at Shaughnessy Military Hospital, Vancouver, followed by luncheon at Shaughnessy Heights Golf Club.

The following officers were elected for 1954-1955: President: Dr. N. M. Wrong, Toronto, Ont.; Vice-president: Dr. J. P. Grandbois, Quebec, Que. Secretary: Dr. A. R. Birt, Winnipeg, Man.; Regional Secretary: Dr. R. C. Smith, Toronto, Ont. A. R. BIRT

THE SEVENTH INTERNATIONAL CONFERENCE OF SOCIAL WORK

Toronto, June 27 to July 2, 1954

The Seventh International Conference of Social Work convened in Toronto on June 27, 1954, under the presidency of George F. Haynes. Eighteen hundred delegates from 48 countries registered for the Conference.